

ABSTRACT OF THE DISCLOSURE

A code stream generating part converts image data into two-dimensional wavelet coefficients, quantizes the same and coding the quantization result so as to compress the image data and generate a code stream. An additional information creating part creates additional information concerning the image data, and an additional information embedding part embeds the thus-created additional information into the code stream as a code in an off-rule zone which is not decoded by a JPEG 2000 standard rule.